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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,980	12/16/1999	BARTLEY H. CALDER	SUNIP502	9641
22434	7590	05/21/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP			VO, LILIAN	
P.O. BOX 778			ART UNIT	
BERKELEY, CA 94704-0778			PAPER NUMBER	
			2127	
			DATE MAILED: 05/21/2004	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/465,980

Applicant(s)

CALDER ET AL.

Examiner

Lilian Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2, 5 - 10.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 46 are pending.

Election/Restrictions

2. Applicant's election with traverse of Group II, claims 21 – 46 in Paper No. 12 is acknowledged. The traversal is on the ground(s) that “if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions.” Applicants’ remarks have been considered and the restriction requirement is withdrawn.

Drawings

3. The drawings are objected to because figs. 2 – 14 is not clear. Applicants need to submit a better copy of the drawings.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 – 3 and 5 – 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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6. **Claim 1** recites the limitations “an application” in page 32, lines 1, 2 and 6. Are they the same application or different application? Which one of the application that the limitation “the application” in page 32, lines 7, 8 and 10 are referring to?

Similarly, **claims 3, 5, 10, 15, 21, 34** recite more than limitation “an application” and it is not clear which one of the following limitation “the application” is referring to.

A clarification is required.

7. **Claims 18, 27 – 30 and 32** recite the limitation “the associated” in page 36, line 2 and pages 37, line 2, and page 38, line 2, respectively. There is insufficient antecedent basis for this limitation in the claim.

8. **Claim 35** recites the limitation “a state change of the application from a first set of the plurality of states to a second set of the plurality of states” in page 39, lines 7 – 8. The examiner understands that an application can change from one state to another – that is one state at each time but not clear what does it mean by from a set of plurality of states. The limitation of changing from one set of plurality of states to another set of plurality of states is considered too vague and indefinite.

Appropriate clarification is required.

Specification

9. The attempt to incorporate subject matter into this application by reference to attorney docket numbers on page 1 is improper. Applicants need to update the attorney docket numbers with the application numbers.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1 – 30 and 34 – 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Judge et al. (US 6,430,570, hereinafter Judge).

12. Regarding **claim 21**, Judge discloses a system for managing execution of an application according to an application lifecycle (col. 2, lines 29 – 42), the system comprising:

one or more rules (col. 2, lines 29 – 42, col. 9, lines 3 – 10, and fig 4);

an application manager capable of executing one or more applications according to an application lifecycle enabling each of the applications to enter one of a plurality of states in response to one or more associated predetermined commands (col. 2, lines 29 – 42, col. 4, lines

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38 – 67, figs. 1, 2), the application manager capable of selecting one of the predetermined commands to execute according to the one or more rules (col. 2, lines 29 – 42, col. 9, lines 3 – 10, and fig. 4).

13. Regarding **claim 22**, Judge discloses the system as recited in claim 21, further comprising:

a signaling monitor coupled to the application manager and capable of receiving a data stream, the signal monitor adapted for determining whether an application is present in the data stream and communicating information associated with the application to the application manager (col. 3, lines 22 – 40, 57 – col. 4, line 9, col. 6, lines 5 – 15. col. 9, lines 3 – 40, figs. 2 and 4).

14. Regarding **claim 23**, Judge discloses the system as recited in claim 21, wherein the application manager is configured to store an application context for each of the applications, the application context identifying a current one of the plurality of states (co. 7, lines 12 – 27).

15. Regarding **claim 24**, Judge discloses the system as recited in claim 23, wherein the current one of the plurality of states is identified by the associated application to the application manager (col. 7, lines 12 – 27).

16. Regarding **claim 25**, Judge discloses the system as recited in claim 23, wherein the application context further identifies a class loader capable of loading one or more classes

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associated with the application (col. 3, line 3, line 5 – col. 4, line 9, col. 10, line 46 – col. 11, line 58, col. 13, lines 46 – 52, figs. 3, 4 and 6).

17. Regarding **claim 26**, Judge discloses the system as recited in claim 23, wherein the application context further identifies a display context including display information to be displayed (col. 5, line 64 – col. 6, line 4, col. 11, lines 9 – 58, col. 12, lines 1 – 15, and 55 – 67).

18. Regarding **claim 27**, Judge discloses the system as recited in claim 23, wherein the application context further identifies an application environment object enabling the associated application to communicate with the application manager (col. 4, lines 38 – 67, col. 5, lines 33 – 36, col. 7, lines 13 – 27, fig. 6).

19. Regarding **claim 28**, Judge discloses the system as recited in claim 23, wherein the application context further identifies an application environment object that enables the associated application to retrieve properties associated with its runtime environment (col. 4, line 38 – col. 5, line 14, 33 – 36, col. 7, lines 13 – 27, figs. 4 and 6).

20. Regarding **claim 29**, Judge discloses the system as recited in claim 23, wherein the application context further identifies an application environment object that enables the associated application to communicate a state change to one of the plurality of states (col. 4, line 38 – col. 5, line 14, 33 – 36, col. 7, lines 13 – 27, figs. 4 and 6).

21. Regarding **claim 30**, Judge discloses the system as recited in claim 23, wherein the application context further identifies an application environment object that enables the associated application to request that the application manager change the current state of the application from a paused state to an active state (col. 8, lines 25 – 36, col. 9, lines 2 – 40, fig. 4).

22. Regarding **claim 40**, Judge discloses the instructions for executing the application comprise:

a first interface that is visible to an application manager, the first interface adapted for enabling the application manager to cause the application to change its state from one of the plurality of states to another one of the plurality of states (col. 3, lines 22 – 41, col. 7, line 67 – col. 8, line 19, figs. 1, 4, 6 and 7); and

a second interface that is visible to the application, the second interface adapted for enabling the application to communicate to the application manger that the application cannot change its state as the application manger has requested (col. 3, lines 22 – 41, col. 7, line 67 – col. 8, line 19, col. 13, lines 64 – 66, figs. 1, 4, 6, 7 and 9).

23. Regarding **claim 42**, Judge discloses the instructions enabling the application to raise a state change exception indicating that the application does not want to change its state as the application manager has requested (col. 7, line 6 – col. 8, line 11, 25 - 36).

24. Regarding **claim 43**, Judge discloses the instructions for releasing memory associated with the application when the application has been terminated (col. 7, lines 19 – 27).

25. Regarding **claim 46**, Judge discloses the instructions for unloading the classes comprise instructions for de-referencing the class loader (col. 9, lines 49 – 51).

26. **Claims 1 – 20, 34, 35 – 39, 41, and 44 - 45** are rejected on the same ground as stated above.

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. **Claims 31 – 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Judge et al. (US 6,430,570, hereinafter Judge).

29. Regarding **claims 31 - 33**, Judge discloses that application manager manages the executions of every execution program and the requests are being serviced with the appropriated applications running according to application lifecycle and availability of resource within the

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system base on different conditions as showed in fig. 4 (col. 3, lines 22 – 40, col. 4, lines 38 – 67, col. 11, lines 9 – 40, col. 12, lines 1 – 14, 56 – 67, col. 13, lines 36 – 67, figs. 4 and 9)

It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to relate Judge's teaching and concept as illustrated above with limitations as claimed because Judge's system service requests by managing the execution of applications according to its lifecycle, thus communicate the system capabilities and its performance status within the system to service the clients' request.

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 703-305-7864. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

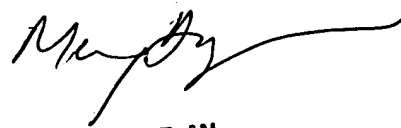
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo
Examiner
Art Unit 2127

lv
May 13, 2004



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